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EXAMINER

LEROUX, ETIENNE PIERRE

ART UNIT PAPER NUMBER

2171

DATE MAILED: 03/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,822

Applicant(s)

KINZHALIN ET AL.

Examiner

Etienne P LeRoux

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,954,826 issued to Herman et al (hereafter Herman '826)

Claims 1 and 15:

Herman '826 discloses a method for collecting information on a specification for a computer program, comprising the operations of:

- providing a plurality of classes, each class capable of performing a particular task related to obtaining information from a specification,
- receiving a command from a user, the command requesting a particular task to be performed,
- selecting a class from the plurality of classes based on the task requested by the received command
- running the selected class, whereby information on the specification is obtained [Figs 4,5 and 6]

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman '826 in view of Pub No US 2002/0089526 issued to Buxton et al (hereafter Buxton '526).

Claims 2 and 16:

Herman '826 discloses the elements of claims 1 and 15 as noted above.

Herman '826 fails to disclose wherein the plurality of classes includes a get assertion class that obtains assertions from the specification

Buxton '526 discloses wherein the plurality of classes includes a get assertion class that obtains assertions from the specification [paragraph 140]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman '826 to include wherein the plurality of classes includes a get assertion class that obtains assertions from the specification as taught by Buxton '526.

The ordinarily skilled artisan would have been motivated to modify Herman '826 as per the above for the purpose of checking the performance of an applet [paragraphs 136-139]

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Herman '826 and Buxton '526 and further in view of US Pat No 5,850,631 issued to Golshani et al (hereafter Golshani '631).

Claim 3:

The combination of Herman '826 and Buxton '526 discloses the elements of claims 1 and 2 as noted above.

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The combination of Herman '826 and Buxton '526 fails to disclose the operation of obtaining a list of insertions from the specification using the get insertion class.

Golshani '631 discloses the operation of obtaining a list of insertions from the specification using the get insertion class [abstract]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Herman '826 and Buxton '526 to include the operation of obtaining a list of insertions from the specification using the get insertion class as taught by Golshani '631.

The ordinarily skilled artisan would have been motivated to modify the combination of Herman '826 and Buxton '526 per the above for the purpose of comparing two objects [abstract]

Claim 4:

The combination of Herman '826, Buxton '526 and Golshani '631 discloses the elements of claims 1-3 as noted above.

The combination of Herman '826, Buxton '526 and Golshani '631 fails to disclose

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Herman '826, Buxton '526 and Golshani '631 to include

The ordinarily skilled artisan would have been motivated to modify the combination of Herman '826, Buxton '526 and Golshani '631 per the above for the purpose of performing quality assurance.

6. Claims 5-7 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herman '826 in view of Pub No US 2002/0138510 issued to Tan (hereafter Tan '510).

Claims 5-7 and 18-20:

Herman '826 discloses the elements of claims 1 and 15 as noted above.

Herman '826 fails to disclose wherein the plurality of classes includes a reporting class that provides information on test coverage of the specification.

Tan '510 discloses wherein the plurality of classes includes a reporting class that provides information on test coverage of the specification [paragraph 20]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Herman '826 to include wherein the plurality of classes includes a reporting class that provides information on test coverage of the specification as taught by Tan '510.

The ordinarily skilled artisan would have been motivated to modify Herman '826 as per the above for the purpose of testing a storage device [paragraph 20].

Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,675,729 issued to Mehring (hereafter Mehring '729).

Claim 8:

Mehring '729 discloses a computer program for obtaining assertions from a specification for a computer program comprising:

a code segment that receives an input specification for a computer program

a code segment that identifies a context within the input specification,

a code segment that parses the identified context to obtain assertions, and a code segment that adds the obtained assertions to an assertion result set wherein the assertion result set can be used to facilitate testing of the specification [col 1, lines 40-60 and Fig 4 and col 6, lines 53-67]

Claims 8 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,892,947 issued to DeLong et al (hereafter DeLong '947).

Claim 8:

DeLong '947 discloses a computer program for obtaining assertions from a specification for a computer program comprising:

a code segment that receives an input specification for a computer program

a code segment that identifies a context within the input specification,

a code segment that parses the identified context to obtain assertions, and a code segment that adds the obtained assertions to an assertion result set wherein the assertion result set can be used to facilitate testing of the specification [col 5, lines 44-57]

Claim 12:

DeLong '947 discloses wherein the context is a set of circumstances related to the obtained assertions [col 5, lines 44-57]

7. Claims 9, 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLong '947 in view of US Pat No 5,826,025 issued to Gramlich (hereafter Gramlich '025).

Claim 9:

DeLong '947 discloses the elements of claim 8 as noted above.

DeLong '947 fails to disclose a code segment that filters the identified context prior to parsing the context.

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Gramlich '025 discloses a code segment that filters the identified context prior to parsing the context [col 2, lines 20-39]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify DeLong '947 to include a code segment that filters the identified context prior to parsing the context as taught by Gramlich '025.

The ordinarily skilled artisan would have been motivated to modify DeLong '947 as per the above for the purpose of looking for key phrases or patterns in documents [col 2, lines 25-28]

Claim 10:

DeLong '947 discloses an assertion is a testable statement within the specification [col 5, line 44-57]

Claim 13:

DeLong '947 discloses the elements of claims 8 and 9 as noted above.

DeLong '947 fails to disclose wherein each assertion comprises at least one sentence of the specification.

Gramlich '025 discloses wherein each assertion comprises at least one sentence of the specification [col 2, lines 20-39]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify DeLong '947 to include wherein each assertion comprises at least one sentence of the specification as taught by Gramlich '025.

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The ordinarily skilled artisan would have been motivated to modify DeLong '947 as per the above for the purpose of looking for key phrases or patterns in documents [col 2, lines 25-28]

Claim 14:

DeLong '947 discloses the elements of claims 8 and 9 as noted above.

DeLong '947 fails to disclose wherein each assertion comprises at least two sentences of the specification.

Gramlich '025 discloses wherein each assertion comprises at least one sentence of the specification [col 2, lines 20-39]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of DeLong '947 and Gramlich '025 to include wherein each assertion comprises at least two sentences of the specification as taught by Gramlich '025.

The ordinarily skilled artisan would have been motivated to modify DeLong '947 as per the above for the purpose of looking for key phrases or patterns in documents [col 2, lines 25-28]

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of DeLong '947 and Gramlich '025 and further in view of US Pat No 5,911,041 issued to Schaffer (hereafter Schaffer '041).

Claim 11:

The combination of DeLong '947 and Gramlich '025 discloses the elements of claims 8 and 9 as noted above.

The combination of DeLong '947 and Gramlich '025 fails to disclose an assertion is an implied statement that can be tested.

Schaffer '041 discloses an assertion is an implied statement that can be tested [col 1, lines 27-37]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify combination of DeLong '947 and Gramlich '025 to include an assertion is an implied statement that can be tested as taught by Schaffer '041.

The ordinarily skilled artisan would have been motivated to modify the combination of DeLong '947 and Gramlich '025 to include the above noted elements for the purpose of developing a suitable test for a software product [col 1, lines 27-37]

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Herman '826 and Buxton '526 and further in view of Golshani '631.

Claim 17:

The combination of Herman '826 and Buxton '526 discloses the elements of claims 15 and 16 as noted above.

The combination of Herman '826 and Buxton '526 fails to disclose the operation of obtaining a list of insertions from the specification using the get insertion class.

Golshani '631 discloses the operation of obtaining a list of insertions from the specification using the get insertion class [abstract]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Herman '826 and Buxton '526 to include the operation

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of obtaining a list of insertions from the specification using the get insertion class as taught by Golshani '631.

The ordinarily skilled artisan would have been motivated to modify the combination of Herman '826 and Buxton '526 per the above for the purpose of comparing two objects [abstract]

Response to Arguments

Applicant's arguments filed 1/7/2004, have been fully considered but they are not persuasive.

First Applicant Argument:

Applicant states he following in the third paragraph on page 3:

In contrast with the recited independent claims, while Herman et al teaches a specification with a plurality of classes, Herman et al does not teach providing a plurality of classes such hat each class is

First Examiner Response:

Examiner is not persuaded. It is necessary to refer to the specification regarding a definition of claim language. In particular, it is necessary to consider how "performing a particular task" is supported in the specification. The following is taken from Summary of the Invention in the specification:

Summary of Invention Paragraph:

[0015] Broadly speaking, the present invention fills these needs by providing a system for tracking a specification that automatically obtains assertions within the specification. The embodiments of the present invention further provide tracking between different versions of a specification, and also determine test coverage of a specification. In one embodiment, a method for collecting information on a specification of a computer program is disclosed. **A plurality of classes is provided, where each class is capable of performing a**

particular task related to obtaining information from a specification. Then a command is received from a user. The command requests a particular task to be performed. A class is then selected from the plurality of classes based on the task requested by the received command, and the selected class is run. In this manner, information on the specification is obtained. The plurality of classes can include a get assertion class that obtains assertions from the specification, and in some embodiments, the get assertion class can be used to obtain a list of assertions from the specification. The plurality of classes can also include a reporting class that provides information on test coverage of the specification. The information on test coverage of the specification can comprise a list of assertions that are tested by specification tests, and optionally, can comprise a percentage of the assertions obtained from the specification that are tested by specification tests.

Considering above disclosure in Applicant's specification, examiner maintains the following teaching by Herman, column 4, line 62 through column 5, line 6 reads on the claim 1 limitation "each class performing a particular task related to obtaining information from a specification."

The user may initiate the data analysis by clicking "analyze classes" button 440 ("class" is a name used for Java program files). The results of the analysis (i.e. testing the user selected program files for compatibility with the user selected specification files) are displayed in result display area 415. In addition, in the example of FIG. 4, the number of each of the error types selected by the user that are found during the analysis is displayed next to the error type name in analysis criteria selection area 410, and a message indicating information about the analysis performed (e.g. "The class files analyzed do not conform to the specification files") is displayed in status message area 110.

Herman teaches that a particular Java program file (i.e., class) is analyzed and results of the analysis are displayed to the user.

Second Applicant Argument:

Applicant states, page 4, lines 8-10, "However, what Mehring does not teach is a computer program for obtaining assertions from a specification for a computer program such that a code segment parses the identified context to obtain assertions."

Second Examiner Response:

Examiner is not persuaded. It is necessary to refer to the specification regarding a definition of claim language. In particular, it is necessary to consider how “a code segment that parses the identified context to obtain assertions” is supported in the specification. The following is taken from Summary of the Invention in the specification:

Summary of Invention Paragraph:

[0016] In another embodiment, a computer program for obtaining assertions from a specification for a computer program is disclosed. As mentioned above, an assertion is a testable statement within the specification. The computer program includes a code segment that receives an input specification for a computer program, and a code segment that identifies a context within the input specification. Further included is a code segment that parses the identified context to obtain assertions, and a code segment that adds the obtained assertions to an assertion result set. The assertion result set can then be used to facilitate testing of the specification. Optionally, a code segment that filters the identified context prior to parsing the context can be included. Also optionally, the computer program can obtain assertions, which are implied statements that can be tested. Further, each assertion can comprise at least one sentence of the specification.

Furthermore, it is useful to consider the following definition of parse:

To break input into smaller chunks so that a program can act upon the information.¹ Mehring discloses in column 6, lines 53-66 the following:

Also included in the present embodiment is assertion control register 140, an embodiment of which is illustrated in FIG. 4. The assertion control register is used to indicate the state of the event which causes a trigger signal. Thus, for example, when the bit is asserted, the trigger signal is inverted. Therefore the event may be due to the occurrence of a certain event or the non-occurrence of the event. This provides even further flexibility in programming the particular events that are to be monitored by the counter mechanism. Referring back to FIG. 2, in the present embodiment, the bits of the assertion control register 140 are input into exclusive OR gates 150. The second input to the gates 150 is the corresponding event. Thus, either the non-existence or the existence of a certain event will generate a signal in the trigger select logic.

¹ Microsoft Computer Dictionary, Fifth Edition

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Examiner maintains above OR gates which provide input to the assertion control register reads on a code segment that parses the context to obtain assertions.

Third Applicant Argument:

Applicant states in lines 16-21 on page 4 “However, DeLong et al does not teach the parsing of a context to obtain assertions such as the assertions shown in Table 2 of the Specification (page 22). Table 2 shows that an assertion can be ‘creates a string representation of the first argument in the radix specified by the second argument.’ Because DeLong et al does not teach the assertions disclosed by the claimed invention, the reference cannot anticipate independent claim 8.”

Third Examiner Response:

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., creates a string representation of the first argument in the radix specified by the second argument) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Further Applicant Arguments:

Applicant's arguments on pages 5-7 are too convoluted to easily understand and thus examiner is unable to respond.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620. The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux

3/26/2004



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